

**Spring 2024
Colloquium Series**



PEDRO RAPOSEIRO

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**Paleolimnology in the Azores –
Opportunities, challenges and new approaches**

Paleolimnology emerged in the 19th century and developed towards the end of the last century as one of the key disciplines within limnology. Paleolimnological studies focus on reconstructing the paleoenvironments of inland waters, associated especially with events such as climate change, human impacts, and internal ontogenic processes.

This multidisciplinary science uses the physical, chemical, and biological information preserved in sediment profiles to reconstruct past environmental conditions in inland aquatic systems. Some works already published demonstrate the importance of paleolimnological studies in the Azores. Through this approach, it has been possible to clarify the native or introduced character of some species of Azorean flora, the impact of human activities in modifying ecosystems, the effect of invasive species on the trophic chains of lakes, the reconstruction of chemical characteristics of water in past times, the validation or rejection of candidate sites for quality references within the environmental assessment system implemented by the Water Framework Directive or the effects of climate on ecosystems.

Despite the work already done, the potential of paleolimnology in the Azores is enormous. With the development of new techniques, new opportunities for future reconstruction are open. We will present some of the new techniques in paleolimnology and their applications

Bagels, donuts, and coffee
available in **SRCC 219**
before the talk!

April 18, 2024
Thaw 104 @ 4:00PM